## Setting up Learning Centres for Independent Inquiry

Focus of Learning	Materials
<ul> <li>Drama Center</li> <li>Emphasis on: <ul> <li>Sociodramatic play-creating narrative structures, understanding roles, and taking perspectives</li> <li>Language and communication</li> <li>Literacy and math</li> <li>Collaboration and social skills</li> </ul> </li> </ul>	Furniture that will promote the drama. (A stage for a television studio, a commercial or student-made theatre for puppets, a screen and projector for shadow plays, tables and chairs for a home setting, shelves for a store, etc.) Props. (Large pieces of materials for making items of clothing, glasses for changing characters, masks as appropriate to the drama, a microphone, various kinds of puppets, etc.) Literacy materials. (Tools for writing, environmental print that can be incorporated into the various themes, etc.) Math manipulatives that can extend the play. (Money, calendar, calculators, and other objects as appropriate to the theme.)
<ul> <li>Discovery Center (s)</li> <li>Emphasis on: <ul> <li>Science and math concepts</li> </ul> </li> <li>Inquiry skills: <ul> <li>Technology (design technology and structures and mechanisms)</li> <li>Problem-solving</li> <li>Literacy</li> <li>Language and Communication</li> </ul> </li> </ul>	Furniture to contain sand and water. (Sand, water table, large clear bins for experiments, etc.) Materials to promote various concepts – materials for measurement. (Cups, different sizes of containers; clear tubing, funnels, pulleys for flow; different shapes of containers for molding in sand.) Also important are materials to promote experimentation. (A hose and shower head for a portable shower, bars of soap for the water, blocks of ice, cardboard tubes for the sand, etc.) Another discovery centre might feature collections of objects from the natural world. (Rocks, shells, seeds, nests, etc.) Tools for studying collections include magnifying glasses, measuring tools, etc. A discovery centre or technology centre could include gears, pulleys, different kinds of machines with moving parts, wind-up toys, springing toys, etc. Resources for reference and information. (Non-fiction books, photos, etc.) Writing/drawing tools.
Construction Center Emphasis on: • Science • Technology • Mathematics • Language and Literacy • Problem-solving	Blocks of all types, sizes, and shapes. Various construction materials both commercial (Lego, Marbleworks) and found (yogurt containers, heavy cardbard tubes of various sizes, boards for ramps, molding such as cove molding for ramps, etc.) Workbench with tools. (Hammer, saw, goggles, etc.) Props that support experimentation. (Mirrors for block structures to create different views, plexiglass for creating different levels, flashlights for creating shadows within structures, different lengths of boards for making ramps and connections, etc.) Props that encourage socio-dramatic play. (Models of people, vehicles, animals, sea creatures, etc.) Props that add aesthetics to buildings. (Round tubes, centicubes, coloured tiles, etc.) Literacy props. (Books for information, photos for reference, writing tools, etc.) Math props. (Measuring devices – rulers, timers.)

## Considerations

In grade 1, the themes will likely be from experiences at home and in the community. By grade 3, the repertoire will expand to more fanciful themes.

The drama will evolve on its own but quite often is connected to stories that are read or experiences that have occurred within and outside of the school situation.

Props themselves will stimulate a drama. It is important for children to create what they need for their drama, and not rely only on commercial props.

Children of all ages love to play with natural materials – sand and water. Through using these natural materials, children learn about the properties of the materials. Children use and develop inquiry skills through exploration and experimentation.

The technology skills needed to create a structure from sand is quite different from that of wood. You can do things with water that you can't do with sand.

Collections of objects from the natural world stimulate curiosity and investigation. Such collections naturally lead to comparing, sorting, and classifying.

Children need enough materials to use on their own to be able to build complex structures. Lack of materials becomes frustrating and almost always results in friction when children try to share a basin with very few pieces. It is better to have a lot of a few materials than few of a lot of materials. When choosing materials think about their potential for learning, (blocks for fractions, symmetry, geometry; marble works for speed, distance, time, etc.)

## Setting up Learning Centres for Independent Inquiry continued

Focus of Learning	Materials	
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<ul> <li>Math Manipulatives and Table Toys</li> <li>Emphasis on: <ul> <li>Math concepts</li> <li>Literacy – following directions</li> <li>Interpersonal skills</li> </ul> </li> </ul>	A range of games, puzzles, and brain-teasers to meet the diversity of ability in the classroom. Math manipulatives. (Base ten blocks, tangrams, pattern blocks, geometric shapes, cuisneaire rods, calculators, tools for measuring, etc.)	
<ul> <li>Visual Arts</li> <li>Emphasis on: <ul> <li>Painting</li> <li>Modelling Materials (clay, plasticene, play dough)</li> <li>Collage</li> <li>Design Technology</li> <li>Problem Solving</li> <li>Literacy (representation of ideas, communication, writing) and Math (spatial concepts, patterning, symmetry, etc.)</li> </ul> </li> </ul>	Tools and equipment for painting, etc. Modelling materials. (Mats, sculpting knives, materials for printing and adding to sculptures, boxes for box sculpture, wood for wood sculpture, etc.) Collage materials. (Different sizes and colours of paper, feathers, sequins, twigs, pebbles, nuts, bolts, string, etc.)	
Quiet Areas Emphasis on: • Literacy – reading and writing • Quiet games • Pencil and paper tasks	Furniture to create an area for reading, researching information. (Comfortable chairs/sofa, area carpet, book shelf, computer (s), CD/tape player for listening). Print and media materials – a range of reading materials. (Magazines, non-fiction, poetry, photos, CDs, big books, class- made books, etc.) Tools for writing and resources for writing. (Thesaurus, dictionaries, models of formation of letters.)	

\* Note: Communication and personal skills are embedded in all areas of the activities.

Considerations
Children as young as seven are wizards at solving brain-teasers that adults find impossible. Flexible thinking is one of a child's most amazing talents. Math manipulatives should be available at all times. When children have time to explore them they learn about their properties, see patterns and relationships. Sometimes the math manipulatives are used for building.
Through the arts, children represent their understanding and interpretation of the world. All areas of the arts require skill, as well as imagination. There may be a time when children need direct instruction in technique, but this is not a matter of providing models to copy. Children need time to explore materials and discover what they can do.
Quiet areas could include a reading corner, a writing/publishing centre, a listening centre, etc. Literacy should take place at all of the learning areas. Children need a central place to access materials, and to have materials at some of the centres in the classroom.